

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020732**Date Inspected:** 19-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 12BW to Segment 12CW (Edge Panel I-Rib Stiffener Splice weld)

This QA Inspector observed the in process welding operation by the Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The weld joint was designated as EP3011-001-014. The welder identification was 057333 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-B-U2-FCM-1. The piece mark was identified as the Edge Panel, I-Rib Stiffener Splice weld at Counter Weight side.

Please reference the pictures attached for more comprehensive details.

Segment 12BW (Side Panel, T-Ribs hold back weld)

This QA Inspector observed the in process fillet welding operation by the Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SP3051-001-025. The welder identification was 040775 and was

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB. The piece mark was identified as the Side Panel, T-Ribs hold back weld at Counter Weight side.

Please reference the pictures attached for more comprehensive details.

Segment 12CW (Side Panel, T-Ribs hold back weld)

This QA Inspector observed the in process fillet welding operation by the Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SP3055-001-007. The welder identification was 040775 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB. The piece mark was identified as the Side Panel, T-Ribs hold back weld at Counter Weight side.

Segment 12BW to Segment 12CW (Deck Panel, Transverse Splice weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE12A-003. The welder identification was 040320 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the Deck Panel at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20192.

Segment 12BW to Segment 12CW (Deck Panel Corner Assembly, Transverse Splice weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE12A-002. The welder identification was 040320 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the Deck Panel Corner Assembly at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20192.

Segment 12BW to Segment 12CW (Side Panel Corner Assembly, Transverse Splice weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE12E-003. The welder identification was 046709 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-345-SMAW-3G(3F)-FCM-Repair-1. The piece mark was identified as the Side Panel Corner Assembly at transverse splice, Cross Beam side. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20203.

Segment 12BW to Segment 12CW (Side Panel, Transverse Splice weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE12E-002. The welder identification was 046709 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

WPS-345-SMAW-3G(3F)-FCM-Repair-1. The piece mark was identified as the Side Panel at transverse splice, Cross Beam side. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20203.

Please reference the pictures attached for more comprehensive details.

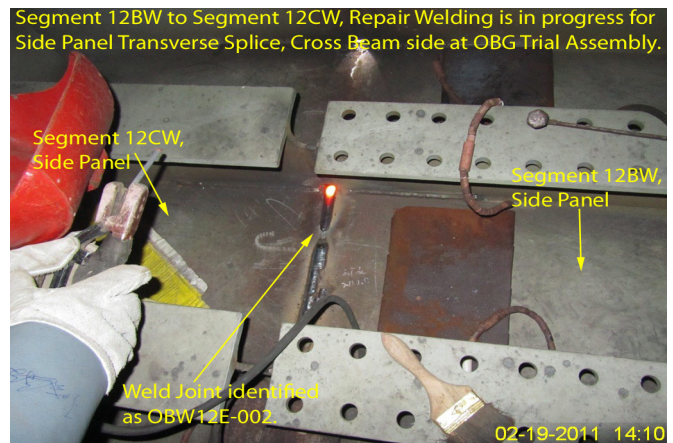
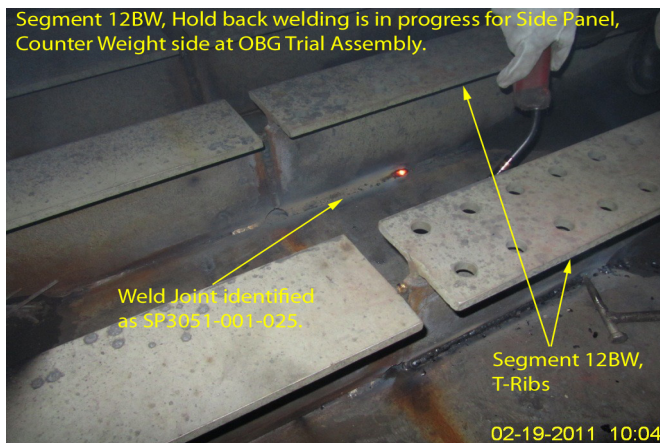
Segment 12BE (Corner Assembly hold back weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as CA3002-006. The welder identification was 052493 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-FCAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the weld connecting the Deck Panel to Edge Panel at Corner Assembly at work point E5. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20200.

Segment 12CE (Corner Assembly hold back weld)

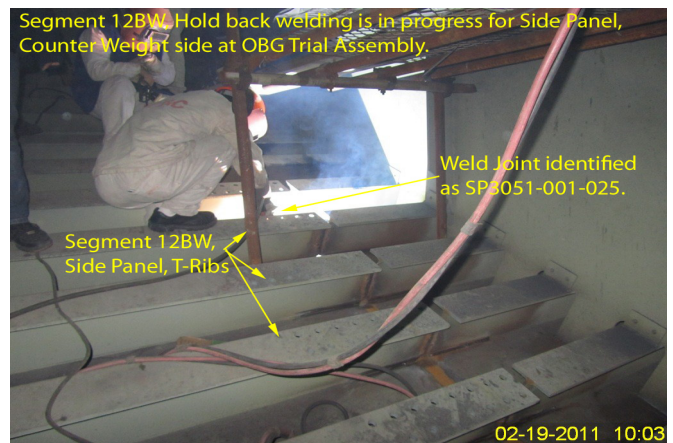
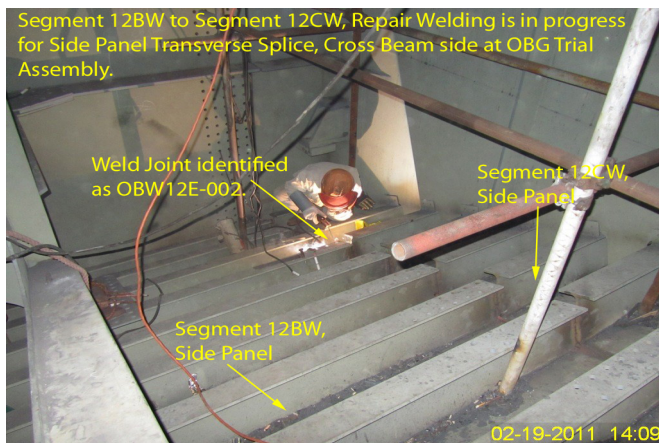
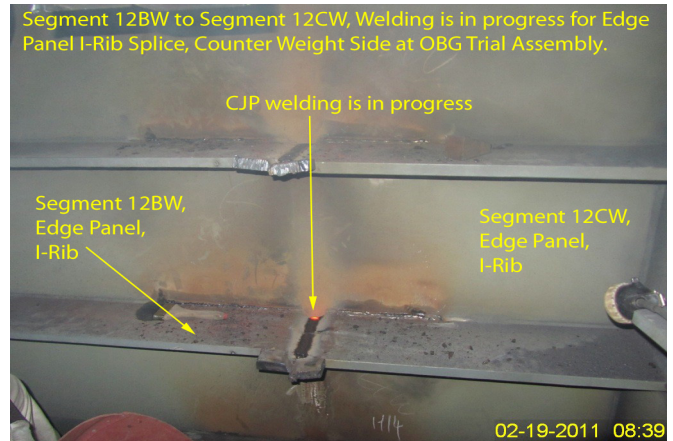
This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as CA3004-002. The welder identification was 052493 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-FCAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the weld connecting the Deck Panel to Edge Panel at Corner Assembly at work point E5. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20200.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer